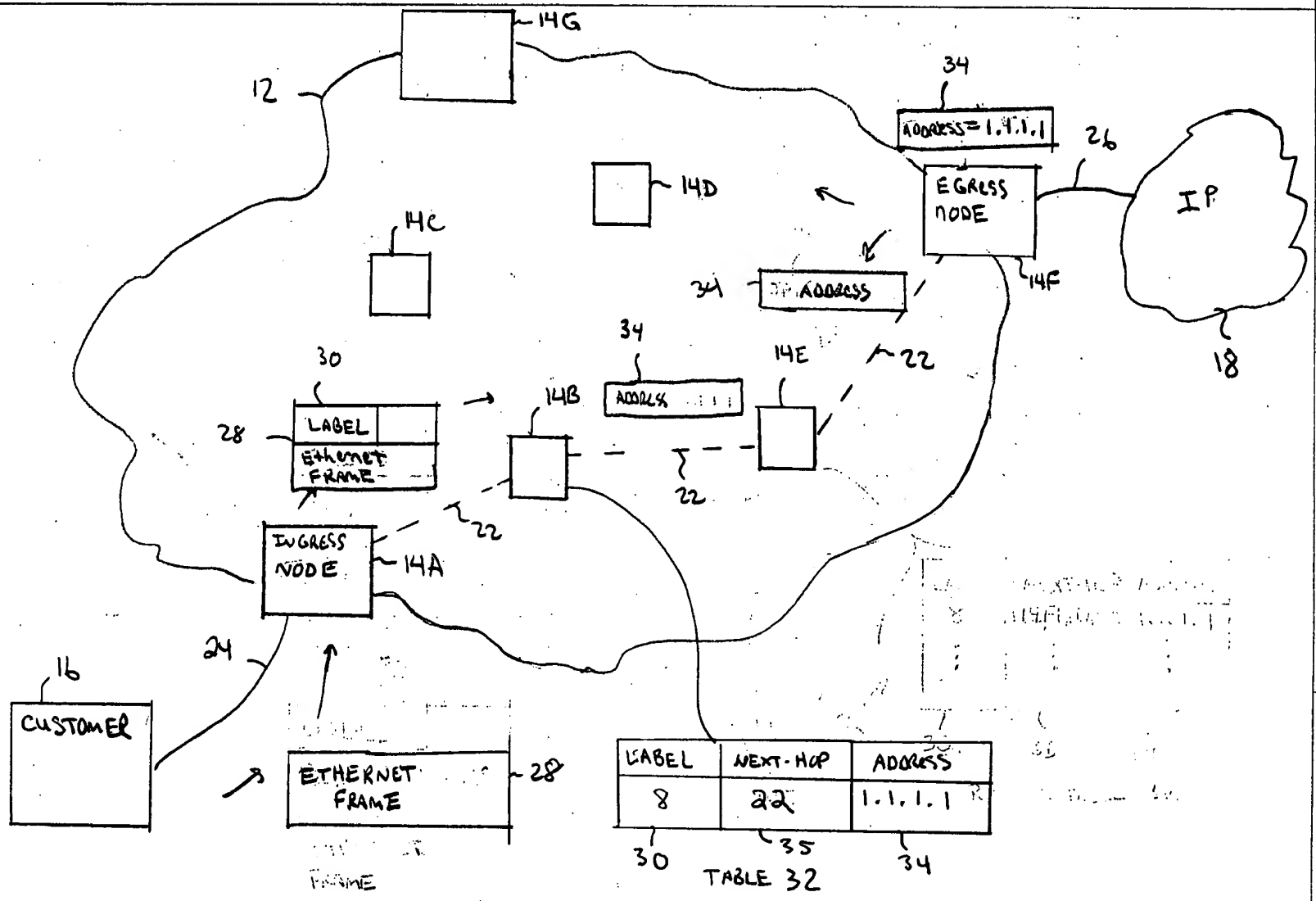
14G
12
34
ADDRESS=1.1.1.1
26
EGRESS NODE
IP
14D
14C
14F
34
ADDRESS
34
30
14E
22
28
LABEL
ETHERNET FRAME
14B
ADDRESS
18
22
22
INGRESS NODE
14A
24
16
CUSTOMER
ETHERNET FRAME
28
FRAME
LABEL
NEXT-HOP
ADDRESS
8
22
1.1.1.1
30
35
34
TABLE 32

FIG. 1

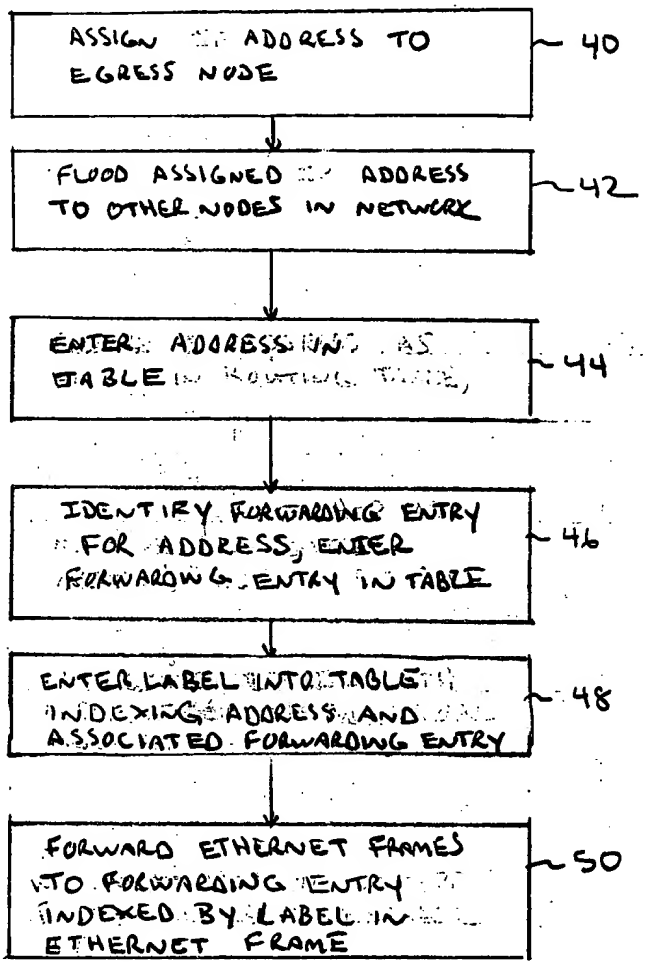
ASSIGN ADDRESS TO EGRESS NODE
40
FLOOD ASSIGNED ADDRESS TO OTHER NODES IN NETWORK
42
ENTER ADDRESS IN ADDRESS TABLE
44
IDENTIFY FORWARDING ENTRY FOR ADDRESS, ENTER FORWARDING ENTRY IN TABLE
46
ENTER LABEL INTO TABLE INDEXING ADDRESS AND ASSOCIATED FORWARDING ENTRY
48
FORWARD ETHERNET FRAMES TO FORWARDING ENTRY INDEXED BY LABEL IN ETHERNET FRAME
50

FIG. 2

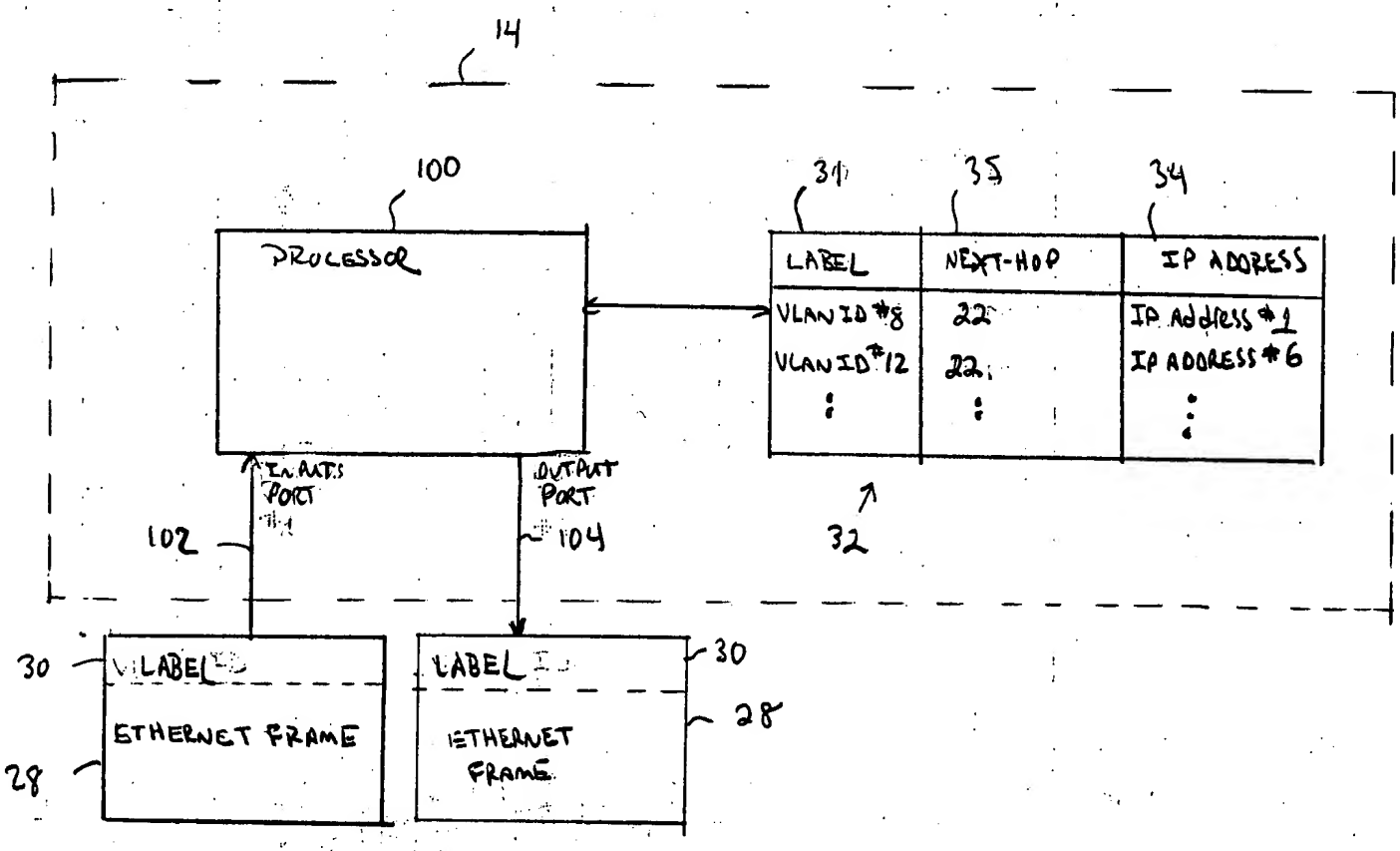
14
100
PROCESSOR
31
35
34
LABEL
NEXT-HOP
IP ADDRESS
VLAN ID #8
22
IP Address #1
VLAN ID #12
22
IP ADDRESS #6
INPUT PORT
OUTPUT PORT
102
104
32
30
LABEL
ETHERNET FRAME
28
30
LABEL
ETHERNET FRAME
28

FIG. 3

T0274"9847260

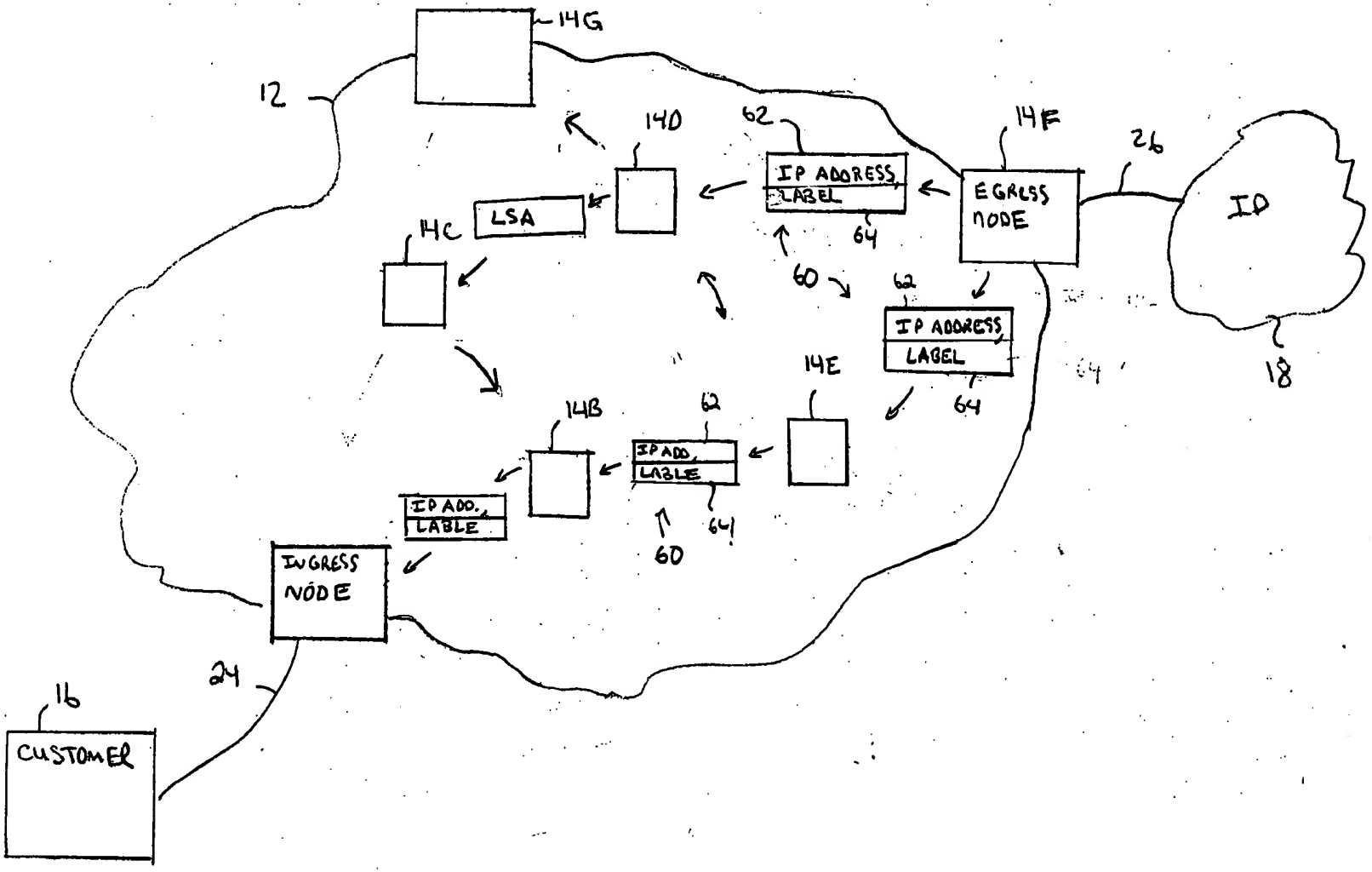

FIG. 4

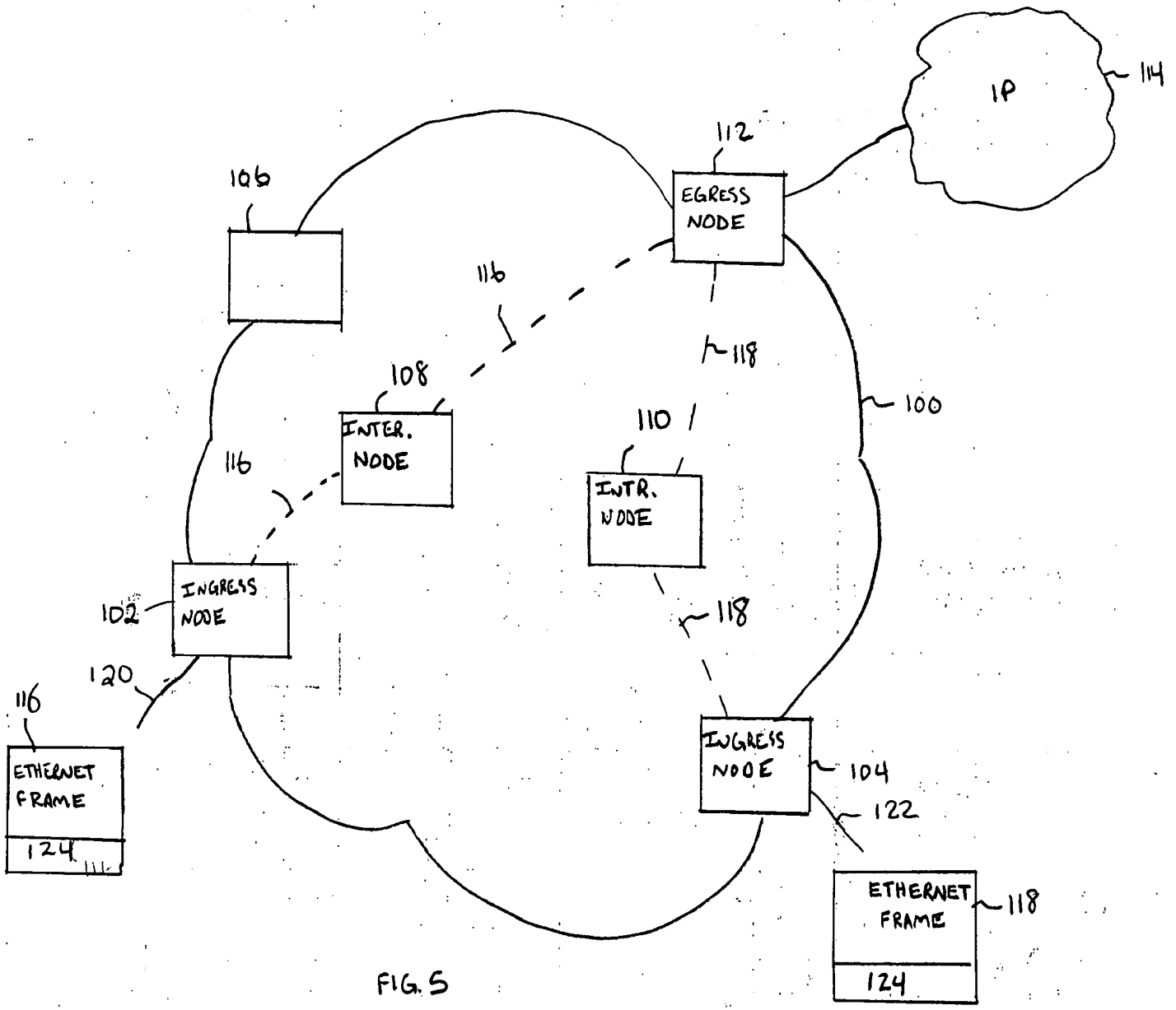
IP
114
112
EGRESS NODE
106
116
118
108
INTER. NODE
110
INTR. NODE
100
116
INGRESS NODE
102
118
120
116
ETHERNET FRAME
124
INGRESS NODE
104
122
ETHERNET FRAME
118
124

FIG. 5

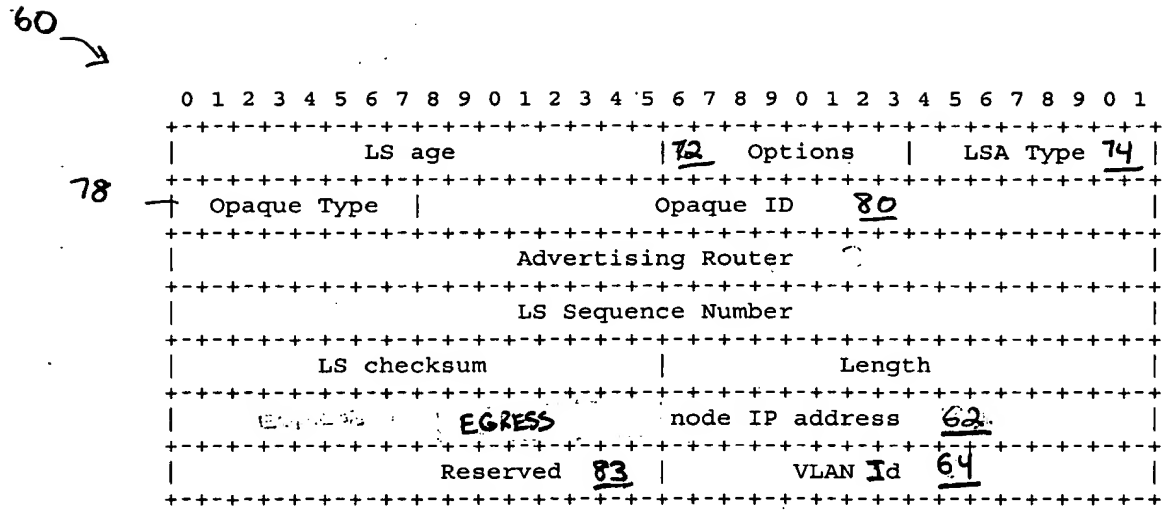
60
78
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
LS age
72
Options
LSA Type
74
Opaque Type
Opaque ID
80
Advertising Router
LS Sequence Number
LS checksum
Length
EGRESS
node IP address
62
Reserved
83
VLAN Id
64

FIG. 6

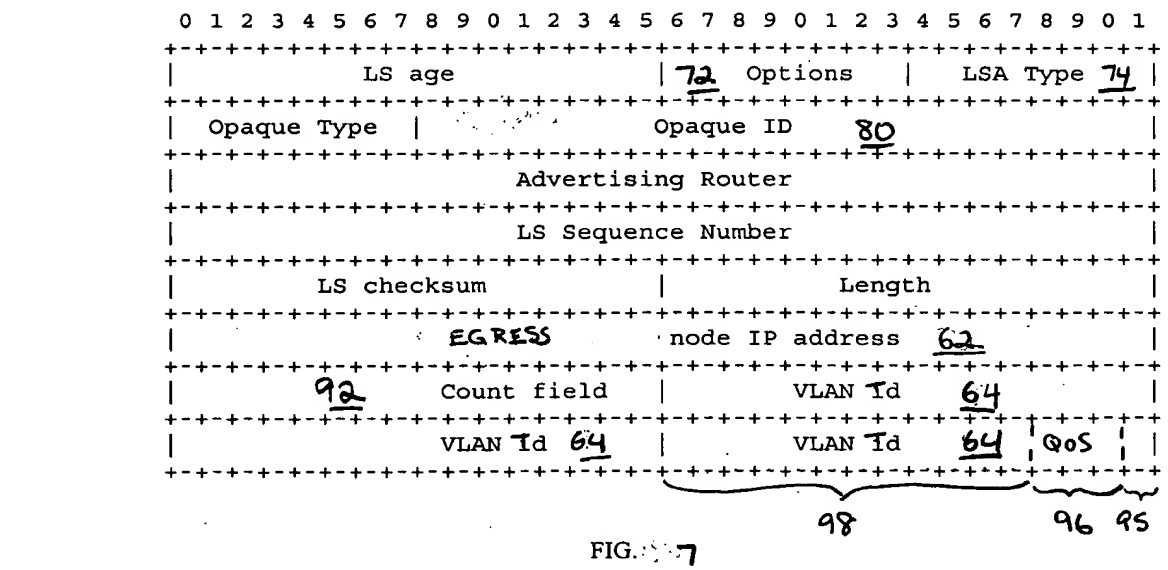
90
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
LS age
72
Options
LSA Type
74
Opaque Type
Opaque ID
80
Advertising Router
LS Sequence Number
LS checksum
Length
EGRESS
node IP address
62
92
Count field
VLAN Id
64
VLAN Id
64
VLAN Id
64
QoS
98
96
95

FIG. 7